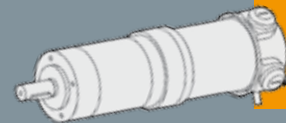


TRANSTECNOTM
THE MODULAR GEARMOTOR

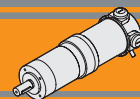
NDP

NDP



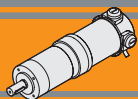
MOTORIDUTTORI C.C. EPICICLOIDALI
RARE EARTH D.C. PLANETARY GEARMOTORS





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NDP



Caratteristiche tecniche

Technical features

Le caratteristiche principali dei motoriduttori a corrente continua a terre rare della serie NDP sono:

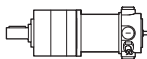
The main features of NDP rare earth D.C. gearmotors range are:

- Alimentazione in bassa tensione 12/24 Vcc
- Possibilità di montaggio encoder
- Potenza motore disponibile 160W S2
- Magneti in Neodimio
- Entrata ed uscita coassiali
- Design compatto
- Lubrificazione permanente a grasso
- Possono essere installati in qualunque posizione di montaggio.

- Low voltage power supply 12/24 Vdc
- Suitable for encoder assembly
- Motor power rating available 160W S2
- Neodyum magnets
- Coaxial arrangement of the input and output
- Compact design
- Permanent grease oil long-life lubrication
- Can be intalled in all mounting position.

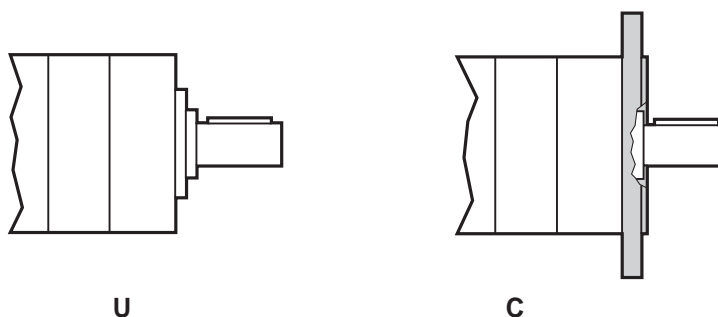
Designazione

Designation

MOTORIDUTTORE / GEARMOTOR						
NDP	120/62	2	C	90	34.97	120
Tipo Type	Grandezza Size	Stadi riduttore Gearbox stages	Versione riduttore Gearbox Version	Flangia uscita Output flange	Rapporto Ratio	Versione Motore Motor Version
NDP 	120/52 120/62 120/72 120/81	1 2 3	U C	80 90 105 120	Vedere tabella See tables	120 240

Versioni

Versions



Simbologia

Symbols

n_1	[min ⁻¹]	Velocità in ingresso / Input speed
n_2	[min ⁻¹]	Velocità in uscita / Output speed
i		Rapporto di riduzione / Ratio
P_1	[kW]	Potenza in entrata / Input power
M_2	[Nm]	Coppia in uscita in funzione di P_1 / Output torque referred to P_1

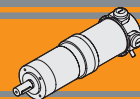
sf		Fattore di servizio / Service factor
Rd	%	Rendimento dinamico / Dynamic efficiency
A_2	[N]	Carico assiale ammissibile in uscita / Permitted output axial load
R_2	[N]	Carico radiale ammissibile in uscita / Permitted output radial load

Lubrificazione

Lubrication

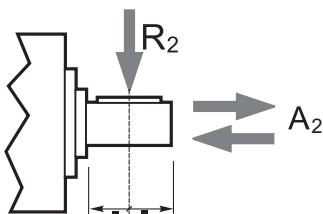
I riduttori epicicloidali sono lubrificati in modo permanente, non richiedono quindi ulteriore manutenzione. Questo gli consente di essere installati praticamente ovunque. La temperatura di funzionamento consentita va da -30 °C a + 140 °C; per applicazioni particolari, possono essere adottate misure per raggiungere livelli di temperatura maggiori.

Planetary gearboxes are life-time lubricated with grease, therefore they are maintenance free. They can be installed in any location. The temperature range is from -30 °C up to + 140 °C; for special applications, measures can be taken for higher temperature range.



Carichi radiali

Radial loads



Numero di stadi Stages number	Carichi Radiali R ₂ [N] / Radial Load R ₂ [N]			
	P52	P62	P72	P81
1	200	240	320	400
2	320	360	480	600
3	450	520	760	1000

Numero di stadi Stages number	Carichi Assiali [A ₂] [N] / Axial Load [A ₂] [N]			
	P52	P62	P72	P81
1	60	70	70	80
2	100	100	100	120
3	150	150	160	200

Rapporti

Ratios

Numero di stadi Stages number	Per tutte le grandezze di riduttori della serie P For all gearbox sizes of P range	
	Rapporti / Ratios	
1	3.70	
	4.28	
	5.18	
	6.75	
2	13.73	
	15.88	
	18.36	
	19.20	
	22.20	
	25.01	
	26.85	
	28.93	
	34.97	
	45.56	
3	50.89	
	58.85	
	68.06	
	71.16	
	78.71	
	92.70	
	95.17	
	99.50	
	107.20	
	115.07	
	123.97	
	129.62	
	139.13	
	149.90	
	168.84	
181.24		
195.26		
236.09		
307.54		

Rapporti preferenziali
Preferred ratios

Disponibile a 4 stadi con rapporti fino a 2076
Available 4 stages with ratio up to 2076

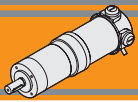
Rendimento

Efficiency

Rendimento Efficiency	Per tutte le grandezze di riduttori della serie P For all gearbox sizes of P range		
	Numero di stadi / Stages number		
	1	2	3
Rd %	80	75	70

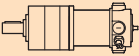
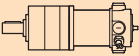
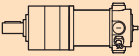
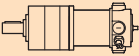
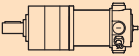
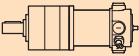
Rendimento medio per velocità nominale in ingresso 3000 rpm
Average efficiency with input rated speed 3000 rpm

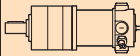
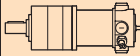
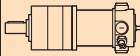
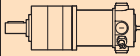
NDP

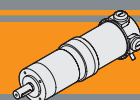


Dati tecnici per servizio S2

Technical data for S2 duty

P_1 [W]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i		Versione motore Motor version		
160								
(3000 min ⁻¹)	811	1.5	2.6	3.70		NDP120/521 120/240		
	701	1.7	2.3	4.28				
	579	2.1	1.9	5.18				
	444	2.8	1.5	6.75				
	218	5.3	2.3	13.73		NDP120/522 120/240		
	189	6.1	2.0	15.88				
	163	7.0	1.7	18.36				
	156	7.3	1.6	19.20				
	135	8.5	1.4	22.20				
	120	9.6	1.3	25.01				
	112	10	1.2	26.85				
	104	11	1.1	28.93				
	86	13	0.9	34.97				
	66	17	0.7	45.56				
	59	18	1.4	50.89				NDP120/523 120/240
	51	21	1.2	58.85				
	44	24	1.0	68.06				
	42	25	1.0	71.16				
	38	28	0.9	78.71				
	32	33	0.8	92.70				
	32	34	0.7	95.17				
	30	36	0.7	99.50				
	28	36	0.7	107.20				
	26	36	0.7	115.07				
	24	36	0.7	123.97				
	23	36	0.7	129.62				
	22	36	0.7	139.13				
	20	36	0.7	149.90				
	18	36	0.7	168.84				
	17	36	0.7	181.24				
	15	36	0.7	195.26				
	13	36	0.7	236.09				
	9.8	36	0.7	307.54				
	579	2.1	3.8	5.18		NDP120/621 120/240		
	444	2.8	2.9	6.75				
	218	5.3	4.8	13.73		NDP120/622 120/240		
	189	6.1	4.1	15.88				
	163	7.0	3.6	18.36				
	156	7.3	3.4	19.20				
	135	8.5	2.9	22.20				
	120	9.6	2.6	25.01				
	112	10	2.4	26.85				
	104	11	2.3	28.93				
	86	13	1.9	34.97				
	66	17	1.4	45.56				

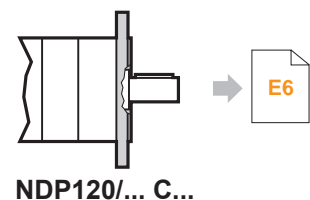
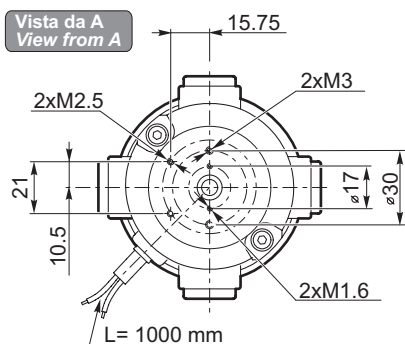
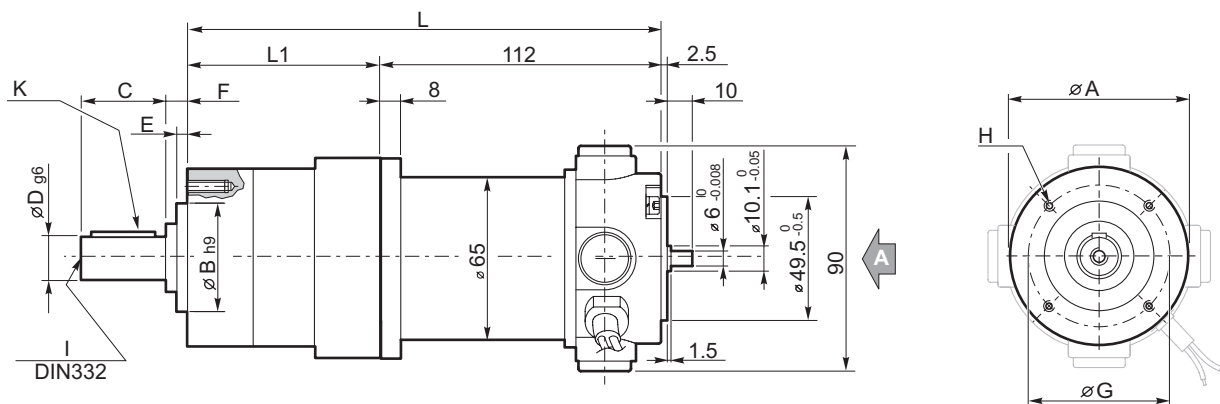
P_1 [W]	n_2 [min ⁻¹]	M_2 [Nm]	sf	i		Versione motore Motor version
160						
(3000 min ⁻¹)	59	18	2.8	50.89		NDP120/623 120/240
	51	21	2.4	58.85		
	44	24	2.1	68.06		
	42	25	2.0	71.16		
	38	28	1.8	78.71		
	32	33	1.5	92.70		
	32	34	1.5	95.17		
	30	36	1.4	99.50		
	28	38	1.3	107.20		
	26	41	1.2	115.07		
	24	44	1.1	123.97		
	23	46	1.1	129.62		
	22	50	1.0	139.13		
	20	54	0.9	149.90		
	18	60	0.8	168.84		
	17	65	0.8	181.24		
	15	70	0.7	195.26		
	13	71	0.7	236.09		
	9.8	71	0.7	307.54		
	44	24	3.5	68.06		NDP120/723 120/240
	42	25	3.3	71.16		
	38	28	3.0	78.71		
	32	33	2.5	92.70		
	32	34	2.5	95.17		
	30	36	2.4	99.50		
	28	38	2.2	107.20		
	26	41	2.0	115.07		
	24	44	1.9	123.97		
	23	46	1.8	129.62		
	22	50	1.7	139.13		
	20	54	1.6	149.90		
	18	60	1.4	168.84		
	17	65	1.3	181.24		
	15	70	1.2	195.26		
	13	84	1.0	236.09		
	9.8	110	0.8	307.54		
	32	33	3.6	92.70		NDP120/813 120/240
	32	34	3.5	95.17		
	30	36	3.4	99.50		
	28	38	3.1	107.20		
	26	41	2.9	115.07		
	24	44	2.7	123.97		
	23	46	2.6	129.62		
	22	50	2.4	139.13		
	20	54	2.2	149.90		
	18	60	2.0	168.84		
	17	65	1.9	181.24		
	15	70	1.7	195.26		
	13	84	1.4	236.09		
	9.8	110	1.1	307.54		



Dimensioni

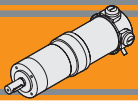
Dimensions

NDP120/... U



NDP

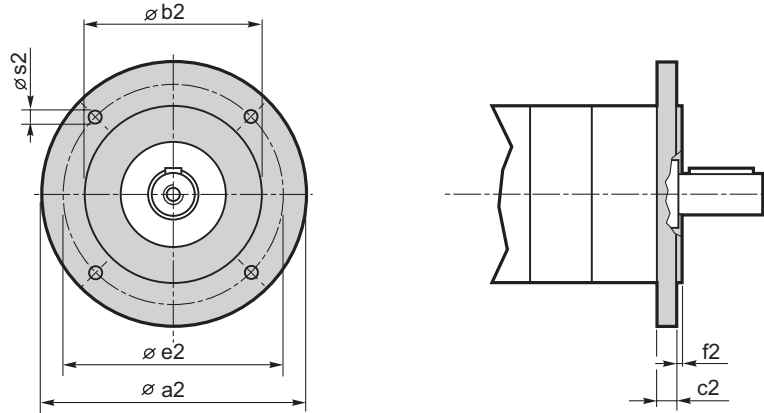
Tipo Type	Numero di stadi Stages number	Dimensioni / Dimensions											
		L1	L	A	B	C	D	E	F	G	H	I	K
NDP120/52...	1	76	188	52	32 h8	20.8	12 h7	3	4.2	40	M5x10	M4x10	4x4x16
	2	90	202										
	3	104.5	216.5										
NDP120/62...	1	74	186	62	40 j7	30	14 h7	5	9	52	M5x10	M5x12	5x5x18
	2	90	202										
	3	106	218										
NDP120/72...	1	78	190	72	45 j7	40	16 h7	5	9	60	M5x10	M5x12	5x5x30
	2	97.5	209.5										
	3	117	229										
NDP120/81...	1	91	203	81	50 j7	40	19 h7	5	9	65	M6x12	M6x16	6x6x28
	2	113	225										
	3	135	247										



Dimensioni

Dimensions

NDP.../... C... Flange uscita / Output flanges



Dimensioni / Dimensions

P	a2	b2	c2	e2	f2	s2	Flangia uscita Output flange
52	80	50 j7	9	65	2.5	M5	C80
	90	60 j7	9	75	2.5	5.5	C90
	105	70 j7	9	85	2.5	6.5	C105
	120	80 j7	9	100	3.0	6.5	C120
62	80	50 j7	9	65	2.5	M5	C80
	90	60 j7	9	75	2.5	5.5	C90
	105	70 j7	9	85	2.5	6.5	C105
	120	80 j7	9	100	3.0	6.5	C120
72	80	50 j7	9	65	2.5	M5	C80
	90	60 j7	9	75	2.5	M5	C90
	105	70 j7	9	85	2.5	6.5	C105
	120	80 j7	9	100	3.0	6.5	C120
81	90	60 j7	9	75	2.5	M5	C90
	105	70 j7	9	85	2.5	M6	C105
	120	80 j7	9	100	3.0	6.5	C120